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LOUISIANA
Conservationist

First Quarter 1978

...comments

What cannot be altered must be borne,
not blamed.

Thomas Fuller

J. BURTON ANGELLE, *Secretary*

The time has come when the people of Louisiana must concern themselves with proper funding of the Department of Wildlife and Fisheries. For many years, this department of state government has generated its own funds and operated as a full state department, without tax dollars. It has been most unusual that any department of wildlife in this country could have operated for so many years and accomplished so much without tax dollars.

Spiraling operational costs have made it obvious that without a supplemental appropriation from the state's general fund, the self-generated funds of the department will not be sufficient to maintain the many, diverse programs and responsibilities of the department. Unless the issue of present funding is restructured and altered, there is little doubt that many of the present programs and services of the department will have to be curtailed, cut back, or eliminated.

Because of the tremendous value and importance of Louisiana's wildlife and fisheries resources from an economic standpoint as well as a recreational viewpoint, this matter of adequate funding of the Department of Wildlife and Fisheries is something that concerns all of the people of Louisiana.

It is a matter that calls for public support. This is an appeal for that support. It would be incredulous to entertain the belief that the people of Louisiana want the general funds of the state to be budgeted to all of the various departments of state government except the Department of Wildlife and Fisheries.

This would be incredulous because it is the Department of Wildife and Fisheries that is responsible for management of wildlife and fisheries resources that are utilized by hundreds of thousands of Louisiana citizens for recreational purposes.

Those same resources also form the basis of a multimillion dollar commercial fisheries and fur economy within the state. Last year alone, the dock side shrimp catch in Louisiana was valued at $94 million. Additionally, there are the valuable oyster and blue crab industries: The state's fur trappers last year reaped a record $25 million. Fresh water commercial fishing is big business.

This is a valuable and important part of the overall Louisiana economy, but it is actually only a fragmentation of the overall picture. There are hundreds and hundreds of thousands of persons in Louisiana who seek outdoor recreation in the form of hunting, fishing, and related outdoor sports. These people are looking to the Department of Wildlife and Fisheries for maximum management of our wildlife resources.

To best understand the problem of funding the department, it would be good to explain in plain language where the money is coming from at the present time and has been derived in years past.

Sales of hunting and fishing licenses, commercial fishing licenses, fur licenses, motorboat registration fees and miscellaneous fees and some severance taxes generated $7,305,065 during the last fiscal year.

Additionally, royalties from mineral leases on department-owned wildlife refuges generated another $9,397,962. Federal funds amounted to $3,321,654.

This money I mention goes into the Conservation Fund from which the actual operating budget of the department is appropriated. In the layman's sense, those self-generated funds of the wildlife and fisheries department are not tax dollars.

Over the years the Department of Wildlife and Fisheries has been able to generate much more money than it has spent. That was basically due to oil revenue from the department's wildlife refuges. But, oil and gas are not renewable resources. They are being depleted and this source of income to the department is dwindling. It is decreasing each year.

There is little doubt that the department will continue to generate millions of dollars each year. This money, flowing into the Conservation Fund, will be a major source of self-generated funds to be appropriated to the department on an annual basis for its operation.

Those who utilize Louisiana's wildlife and fisheries resources commercially and recreationally have been getting a free ride for decades as far as apportionment of the state's general fund has been concerned. Thus far the department has been able to generate as much money as it has been allowed to spend each year.

However, the time is at hand when rising costs, spiraling inflation, and the actual need for additional and expanded wildlife and fisheries programs, along with mandatory environmental duties, has pushed a realistic budget for the department higher than its ability to pay its own way as it has for years.

The time has come when the department must request of the legislature additional funding in order that it can carry out its programs and responsibilities to the people of Louisiana. This is the first time in the history of the department that it has been in this position.

The requests that will be made this year need full understanding and full public support. The only alternative would be to cut programs and services. I do not feel the public wants this done. We ask your support.

Published by the Department of Wildlife and Fisheries in the interest of conservation of Louisiana's natural resources.

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Special Young-People's Feature

OTTER

SKUNK

MUSKRAT

BIO-SCOPE

Fur

By Julia Murchison
Photography by Lloyd Poissenot

Most Louisianians know their state is one of the nation's leaders in oil and gas production, but not many are aware it is the Number One producer of another natural resource—*fur*. Unlike oil and gas, however, fur is a "renewable" resource.

Fur coats and other garments have been in vogue for years, and a great percentage of those adorning the fashion-conscious come from Louisiana animals via New York or European labels.

Not many people realize the strength and importance of today's Louisiana fur industry. During the 76-77 season, trapping brought $25 million into the state economy, providing benefits to about 10,000 trappers, 30 dealers, and over 200 buyers as well as landowners who lease their property to trappers.

Fur was one of the chief resources that attracted early French settlers to Louisiana. Raw fur was the main export from the Louisiana Territory, and New Orleans was a fur trade center. And even today, 90 percent of our raw fur is still shipped to foreign markets where the demand is greater.

As a national leader in wild fur production, Louisiana contributes 40 percent of the entire fur supply in the United States, yielding more pelts than all the Canadian provinces combined.

Trapping not only is a money-making venture, it is an important management tool. It controls overpopulations which can result in food, habitat, and marsh destruction and an unbalanced ecology. For example, if nutria or muskrat were allowed to reproduce uncontrolled, they quickly would deplete food sources for themselves and other wildlife and render their marsh unproductive. And, traditionally, unproductive fur marsh usually ends up being "drained marsh" converted to cattle range. With the loss of wetlands comes the loss of furbearers and the trapping industry, to say nothing of the drastic result on waterfowl nesting grounds.

The Department of Wildlife and Fisheries monitors trapping through seasons, licensing, and tagging regulations. With proper biological management—designed to perpetuate our fur resources—Lousiana will remain the Number One producer state in the nation.

Following is a bio-scope on each of Louisiana's chief furbearers. They are listed in approximate order in terms of numbers produced and value in dollars. . .

NUTRIA

The nutria, also known colloquially as coypu, coypu rat, and swamp beaver, is Louisiana's most important furbearer and the backbone of the fur industry.

He thrives in wet habitat. Largest populations live in the coastal marsh, but some are also found near rivers, lakes, and streams throughout the state. In dry areas they dig burrows for dens; on wet marsh they build vegetation platforms above the water.

The nutria eats no meat. His main diet is aquatic plants such as three-cornered grass, cattail, bullwhip, and alligator weed, but he will also eat other types of grass when these aren't available.

So voracious is his appetite, he can destroy large habitat tracts. An "eat-out", as this is called, occurs in the marsh when an overpopulation eats every bit of existing vegetation, including root systems which bind organic soils together. This creates a mucky, rotten wasteland in the marsh, devoid of food supply and cover for all animals living there.

Nutria hair is long and coarse, ranging in color from light to dark brown. Being a rodent, he looks somewhat like a large brown (and usually wet) rat. In the water, with slicked down hair and long round hairless tail, he hardly looks like an animal whose fur makes beautiful coats and other garments.

He is not a native of Louisiana. In fact, he is a newcomer to the fur industry. E. A. McIlhenny of Avery Island, brought the first nutria to Louisiana from South America in 1938 for experimental purposes and kept them in a 20-acre penned area. But a hurricane in the early 1940's released about 300 animals in South Louisiana, and being prolific breeders with two litters a year containing four to thirteen young per litter, they soon spread across the coast and eventually throughout the rest of the state.

At first, trappers considered this intruder a nuisance, a threat to the profitable muskrat industry. He had no market and even when one began, the pelts sold for just 50¢ each. He was considered an outcast, and was listed by the state as an outlaw. . . until 1968.

That year his value as a furbearer was realized. And today he has grown to top the roster. Last year nutria pelts sold at an average of $8 each, with 1,890,853 pelts bringing in a grand total of $14,700,000. Additionally, 1,980,000 pounds of meat sold for $158,400 to zoos, mink farms, and the pet food industry. Quite a profit for an outlaw!

Nutria supply a quality fur on par with beaver and mink. Pelts dye well in any shade and can be plucked, clipped, sheared, or left natural. The underside provides the softest and most desirable fur, although in recent years the longer back fur has also become popular.

Louisiana produces over 95 percent of the entire world's supply of nutria.

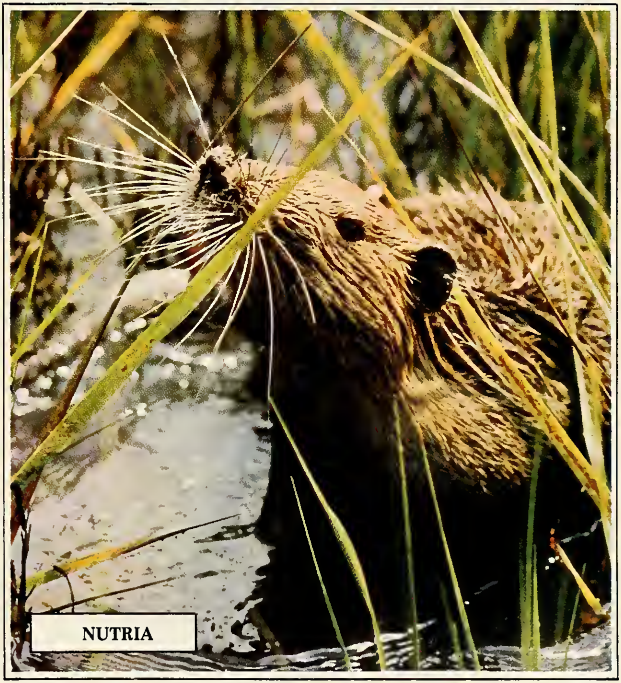
MUSKRAT

The muskrat, Louisiana's second most important fur animal, is found throughout South Louisiana and as far north as Avoyelles Parish. There is also an expanding population in an eight-parish region of northeast Louisiana.

He is most common in the coastal marshes, especially where fresh and saltwater mix. About 80 percent of the state's population lives on a million acres of brackish marsh where three-cornered grass (their favorite food) is dominant. The remaining 20 percent is found in the ricebelt and along bayous and lakes.

In the marsh, the muskrat builds a den from a mixture of vegetation and mud. Some structures are architectural feats, being as wide as six feet and as high as four feet. In drier regions, the muskrat builds his house by burrowing into the ground.

Like his nutria neighbor, he is a lover of grassy plants (cattail, bullwhip, alligator weed, and three-cornered



NUTRIA

grass). But he is unique in that he prefers stems, roots, and tubers. He is not a total vegetarian and will sometimes snack on fish, insects, mussels, and snails. His normal dietary intake often is as much as one-third of his body weight per day. One large rat can eat a square foot of four-foot-tall three-cornered grass or two square feet of any other marsh plant in a day's time. Obviously, it takes tremendous amounts of food to support large muskrat populations.

He gets his name from the musky odor which comes from his lower belly glands. His fur is dark brown in color with a lighter underside. He has sharp claws for digging, average body weight is two pounds, and average length is 22 inches. The long, 10-inch, vertically flattened tail is scaly and hairless. Muskrats are prolific breeders, generally producing five to six litters a year, bearing three to four young each time.

The muskrat is usually considered the most important fur resource in North America because of its large numbers and valuable pelts. Prior to the coming of the nutria, the rat was listed first with the Louisiana fur industry and is still a valuable furbearer. Last year, 965,889 pelts sold for an average of $4.75 each, providing a total income to trappers of over $4 million.

Muskrat fur has always been popular in Europe. It is particularly desirable because the pelts have three distinct colors: a dark stripe down the back, light golden brown sides, and a silverish belly, thus providing variation for three separate garments.

RACCOON

The Northern Raccoon lives throughout Louisiana in all habitat types.

Largest populations occur in marsh and swamp lands, bottomland hardwood and agricultural regions, and sometimes in pine forests. Occasionally they show up in residential suburbs. Coons like to climb and build dens in tree hollows, often as high as 40 feet above the ground.

The raccoon is omnivorous, delighting in feasts of crabs, snails, clams, small fish, and even crawfish when available. He also feeds on earthworms, frogs, and such insects as grasshoppers, beetles, and crickets. Occasionally he will switch to vegetation (berries, acorns, and tender shoots of young plants). And he has been known to raid fields of sweet corn and other commercial crops.

OPOSSUM

The coon is a short legged creature, grayish to blackish in color with varying splashes of yellow. He has a somewhat striped appearance because of black and gray rings around his heavily furred tail and black rings around his eyes. The masked marauder, as he has been called, weighs about eight pounds.

Litters of about three or four are produced once a year. The young, born in April and May, weigh only two or three ounces at birth and are blind for two weeks.

In '76-77, 250,000 raccoon pelts sold for an average of $12 each, bringing the total income to over $3 million. Natural, long hair fur is popular for coat trimmings.

MINK

The North American mink is commonly found throughout Louisiana, but he is especially numerous in southern coastal marshes and swamps. In the northern part of the state, the animal lives along wooded streams and lakes. He is never found far from the water.

The mink builds plush dens under fallen logs, hollow stumps, or burrows, and lines them with soft materials like grass, feathers, and fur. Coastal minks eat aquatic foods, including fish, frogs, crabs, and crawfish. Upland minks eat rats, mice, birds, and rabbits.

He is long-bodied, slender, and weighs about two pounds. Total length runs from 19-23 inches with about one-third of that being tail. His fur is dark brown and has long, glistening guard hairs covering a soft, thick underfur. His chin, and often his entire throat and belly, are white. Minks bear only one litter a year, with three or four pups being the average number of young. At birth they measure only a few inches in length and they are blind for about five weeks.

The mink has always been a principal Louisiana furbearer and one of the most popular finished furs in the fashion world. Last year pelts were worth $11.50 each and a total of 54,858 sold for $630,867.

FOX

Except in the extreme coastal parishes, two species of fox—gray and red—are found throughout Louisiana. Both species prefer a habitat of mixed oak-pine uplands interspersed with farms and pastures. They skirt timbered range near ungrazed fields.

The red fox has adapted well to ricefields, canefields, and cheniers (natural ridges) in southwest Louisiana. The gray fox is unique in that it climbs trees regularly to escape enemies or find food such as bird eggs. Both build dens in hollow trees, underground burrows, or dense thickets, sometimes along stream banks or gullies.

Diet consists of rats, mice, rabbits and other small mammals. They sometimes eat insects and wild birds. The gray fox also utilizes a considerable amount of vegetation, including berries, fruits, corn, and acorns.

Besides difference in color, the two fox cousins can be distinguished by size. The gray fox is somewhat smaller, weighing about 14 pounds and ranging in length from 30-44 inches. The red fox weighs in at 12 to 19 pounds and measures three to four feet in length.

Breeding takes place once a year in late fall and winter. The red fox bears two to ten young; the gray fox has three to five.

Fox fur has increased in number and value over the years. Last season 6,255 pelts valued at $35 each brought $218,925 to trappers, representing a tremendous increase from the prior season when 4,704 pelts worth $23 apiece sold for $108,102. Fur of the red fox is more popular and valuable than that of the gray. Both make lovely coats, jackets, and garments, natural and dyed.

BOBCAT

The bobcat is found statewide except in the treeless coastal marshes. He lives in heavily forested regions, particularly swamps and bottomland hardwoods, and builds his den in thick vegetation.

The 'cat is a predator, eating rabbits, mice, rats, squirrels, and small birds. A greedy creature, he often kills more than he needs, covering the food and leaving it as waste.

Generally, this furbearer is not much larger than a domestic cat, although some get as heavy as 35 pounds and as long as two and a half feet. Coloration is reddish or yellowish brown streaked or spotted with black. His "roar" sounds similar to the howl of a domestic cat, but decidedly more ferocious.

Bobcat fur is very popular, natural and sheared, for sportswear. In past years, the number of pelts taken has been insignificant. Last year, however, marked a notable increase. Average harvest for many years was several hundred, but the '76-77 season marketed 2,997. Pelts sold for $50 each, surpassing even the high priced otter, for a total value of $149,850.

OTTER

The Nearctic River Otter is found throughout Louisiana. Highest densities occur in the coastal region. He always dens along the banks of streams or canals, and the nest is grasslined above water levels with an entrance below water level.

The otter is primarily an aquatic feeder, eating fish, crabs, crawfish, turtles, frogs, and snakes. Occasionally his diet will include small birds, mice, or rats.

Easily recognized by his long, slender body, flattened head, broad neck, and long, flat tail, the otter has dense oily underfur covered with glossy guard hairs that are brown or brownish-black on the back and light brown on the belly. He is a large animal, weighing as much as 15 pounds. There is one litter each year, containing one to three babies called "kits."

The otter has the distinction of being the highest priced fur in Louisiana. Average pelts in the past 20 years have been worth $17. In '76-77, each pelt sold for a record high of $45 and 11,900 pelts brought $535,500 to trappers. Louisiana probably produces more otter per acre than any other region in North America.

The fur is popular for coats, jackets, and trimmings in both natural and sheared form.

Louisiana has a great many other furbearers occuring widely in the state and providing a substantial income. Opossum, coyote, skunk, and beaver, for instance, have been listed consistently in the fur industry. And while these four animals are not as abundant as the others, together they comprise an important part of the overall fur picture.

Out of effective management of large resident populations of furbearers has grown a multi-million dollar industry providing revenues to individual trappers and to the state. And through a continuation of these conservation efforts, the Louisiana fur industry has grown and will continue to be a growing, vital, and prosperous resource.

RACCOON

It took Louisiana Wildlife and Fisheries oyster researchers nine years before they could claim a. . .

Conquest At Calcasieu Reef

Guthrie Perry

Tales of endless resources and inexhaustible supplies of various wild stocks that once blessed our great state are mentioned when conversing about those so-called "Good Ol' Days."

In most instances, we only reminisce of times gone by and hope, somehow by some means, to recapture part of these treasures from the past. Once in a while, though, hopes materialize and these "good times" again return . . . such was the case with oyster production in Calcasieu Lake in 1975. But it didn't just happen all by itself!

Many Louisianians, especially in the southwest part of the state, recall days of plenty when with little effort a person could harvest a winter's supply of succulent oyster meats. Commercial production in Calcasieu Lake flourished as late as the early 1960s, when as much as a million pounds of oyster was yielded annually—and the remarkable aspect of this fishery was the entire harvest came from natural reefs by hand-tongs alone.

Production, both recreational and commercial, continued at a high level until 1965. Then it happened. . .the take dropped from a million pounds of oyster meat in 1963 to "zero" pounds in 1966!

What had happened? No one really knew. Of course, many reasons were advanced: overfishing, pollution, too much freshwater, too much saltwater. But at the time, the Louisiana Department of Wildlife and Fisheries had no coastal research or management program in the southwest portion of the state, and data on the loss of oyster reefs was not available for study. It was not apparent until several years later as to what really had taken place.

By

Charles White
and
Frank Davis

Lloyd Poissenot

Department biologists tried broadcasting clam shells for bottom bed material on Calcasieu Lake, since the technique has proven valuable in many similar situations. But it just didn't work on Calcasieu. . .because "bedding" really wasn't the main problem.

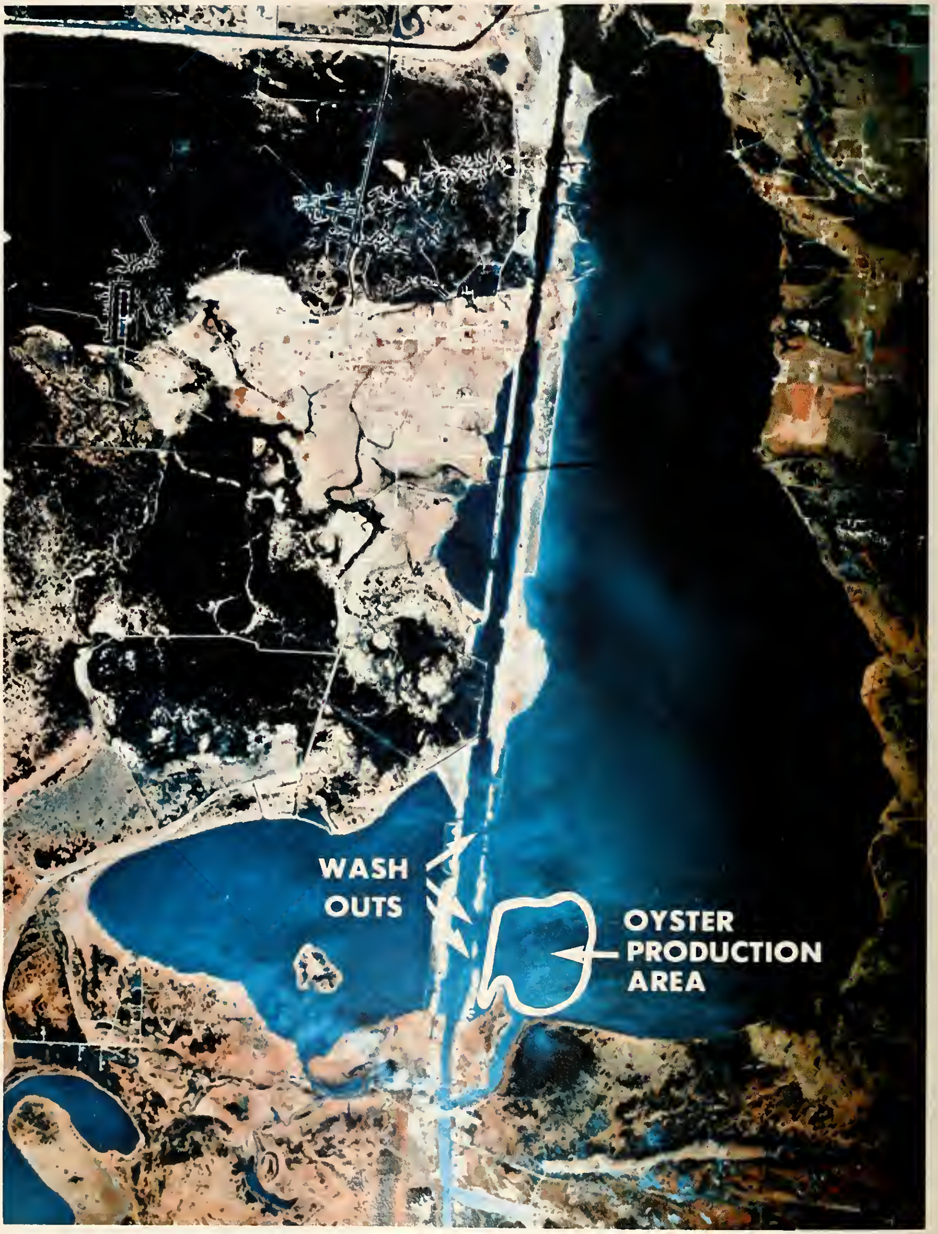
Late in 1966, biological oyster research facilities were established in Lake Charles to try and unravel causes for the loss in Calcasieu and develop procedures for reestablishing the historical reefs. Bit by bit, all new in scope, the pieces began to fall in place (or rather were shoved in place by the work of a determined biological marine team).

Initial efforts on the oyster beds involved the seeding of clam shell for "clutch" (holding) material at strategic sites. The practice had been quite beneficial in similar operations in other parts of the Louisiana coast, but it turned out that it met with very limited success on Calcasieu.

Testing showed that oyster "spat" (young oysters) would set on the experimental clam reefs at an acceptable rate, but they died after several months. It soon became apparent that what was happening in Calcasieu was a lack of adequate water circulation (current) to maintain the young oysters. Scientists also concluded that to be the cause of the major die-off at the natural reefs in 1965.

Review of construction operations in the Calcasieu Basin showed that at the time of oyster reef losses, the U.S Army Corps of Engineers were involved in deepening and widening the Calcasieu Ship Channel. . .near the oyster reefs!

In itself, this operation would not have had major impact on oyster population. . .but what was being done with the spoil dredged from the channel would. And did. In prior channel maintenance projects, spoil was used to construct *staggered levees* (which had little effect on oyster beds). But the plans had changed—spoil now was being used for *continuous levees*. While they proved good methodology for reducing cost and effort in main-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taining the ship channel, they were also causing the problems for oysters.

Immediately the wildlife and fisheries, using oyster dredges, physically moved the remaining oysters from the area (some 25,000 sacks) to safe bedding grounds away from the spoil levee route.

By way of explanation, to maintain a continuous levee system for the Calcasieu Ship Channel, it is necessary to refurbish the levee every two years because tidal stress and wave action continually breach the spoil and create small openings called "washouts." In 1968, and again in 1970, the continuous levee system was rebuilt, blocking the washouts that produced the "right" circulation pattern needed for oyster habitat in the lower stretches of the ship channel. So with circulation interrupted. . .oyster population plummeted downward!

Prior to the maintenance program oi 1972, Louisiana Wildlife and Fisheries personnel approached the Corps of Engineers and presented the problem to them, asking that an effort be made to restrict spoiling along the eastern levee between Mile 5.0 and Mile 9.0 of the channel. It was the consensus of department personnel that by allowing washouts to develop, proper circulation patterns would reestablish in Calcasieu Lake and eventually return oyster production in the lake.

After a series of meetings among representatives of the Corps of Engineers, the Lake Charles Port and Harbor Authority, the Wildlife and Fisheries, the Calcasieu Rod and Gun Club, area news media, and hundreds of private individuals, the Corps agreed to make whatever changes it could to reach the goals sought by the various groups.

Shortly after the meeting, the Corps submitted an interim maintenance plan for the 1972 Calcasieu Ship Channel contract, calling for placing spoil only on the west-side levee of the channel between Mile 5.0 and Mile 9.0. The alteration allowed that portion of the eastern spoil levee to erode and increased current in the lower portion of Calcasieu Lake east of the channel.

Similar interim plans were also employed in the 1974 and 1976 maintenance contracts. And since 1972, the small trickles that breached the eastern side have enlarged to approximately 4,000 feet of open washouts.

What were the results?

Current patterns quickly cleaned the former productive reefs. . .and by late 1973 live oysters once again were thriving on the old beds.

In November, 1975, an oyster season was held on Calcasieu Lake east of the ship channel for the first time in nine years, and harvest far exceeded expectations. Between 35,000 and 50,000 sacks of oysters were taken by both commercial and recreational fishermen. A total of 611 commercial tonging licenses were sold that year.

In 1976, the results were even more impressive. Commercial harvest alone reached 100,000 sacks (approximately a million pounds of meat), a figure comparable to the best years of the "good ol' days." A total of 1,421 commercial licenses were sold. Sack value was $8, with a three-fold return at dockside. Calcasieu Lake oyster production added an excess of $2 million to the economy of Louisiana. And. . .many hours of recreation benefit—at a limit of two sacks of oysters per boat—were afforded sportsmen by return in production.

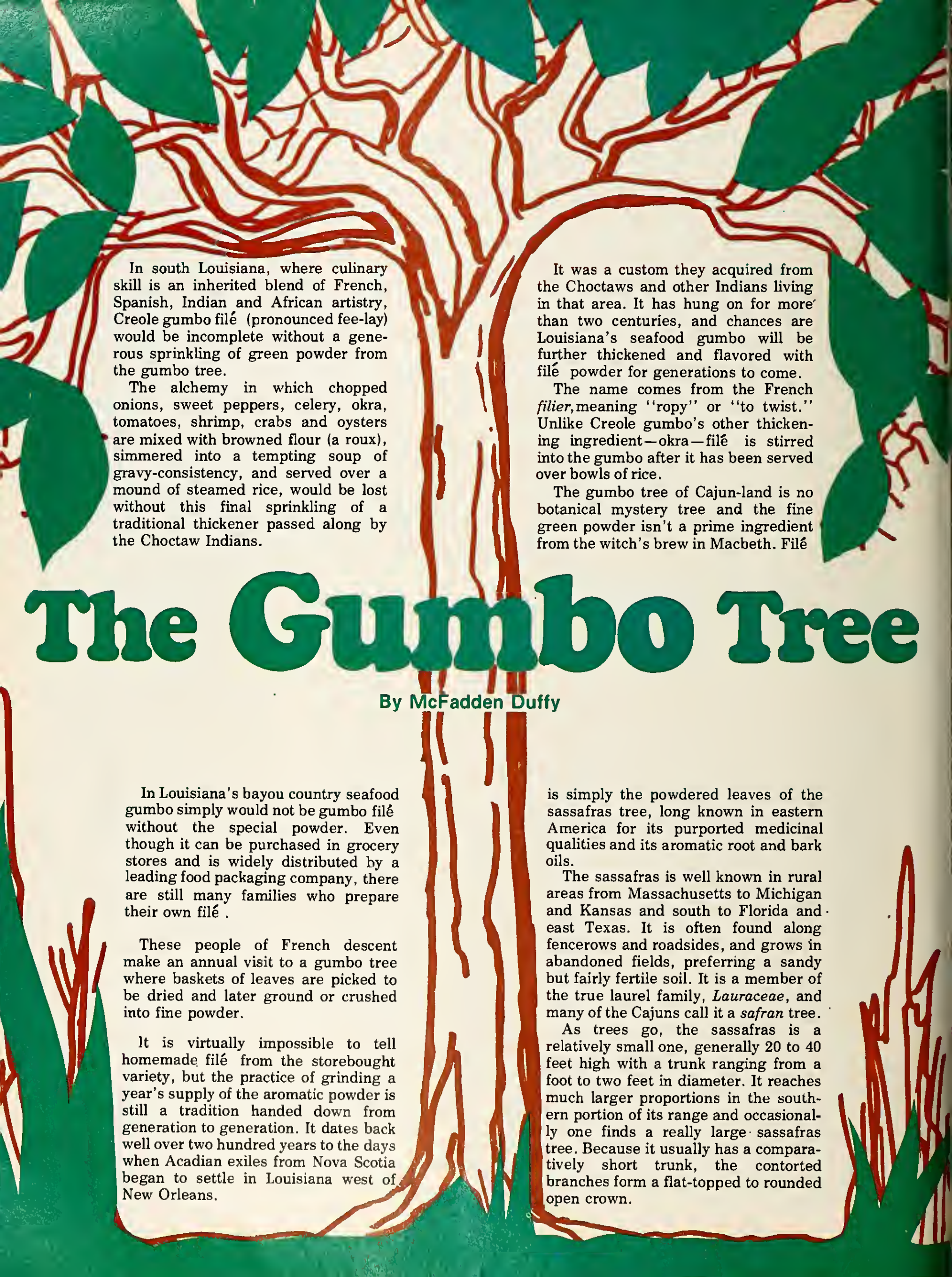
The true value of the Calcasieu Lake experience may not be in dollars earned, but simply in that people, in spite of the problems that stifle each decision made today, and in spite of diversified attitudes, can still pull together in a common cause and achieve a common goal.

Lloyd Poissenot

Close-up of a Louisiana oyster shows the reason behind the essentials for scientific management of the mollusk. Oysters are delicate creatures that require stringent habitat if they are to survive.

Guthrie Perry

Success of the department's research program is once again demonstrated. . .after an absence of oysters on Calcasieu for the past 10 years, tongers again have oysters to harvest.



The Gumbo Tree

By McFadden Duffy

In south Louisiana, where culinary skill is an inherited blend of French, Spanish, Indian and African artistry, Creole gumbo filé (pronounced fee-lay) would be incomplete without a generous sprinkling of green powder from the gumbo tree.

The alchemy in which chopped onions, sweet peppers, celery, okra, tomatoes, shrimp, crabs and oysters are mixed with browned flour (a roux), simmered into a tempting soup of gravy-consistency, and served over a mound of steamed rice, would be lost without this final sprinkling of a traditional thickener passed along by the Choctaw Indians.

In Louisiana's bayou country seafood gumbo simply would not be gumbo filé without the special powder. Even though it can be purchased in grocery stores and is widely distributed by a leading food packaging company, there are still many families who prepare their own filé .

These people of French descent make an annual visit to a gumbo tree where baskets of leaves are picked to be dried and later ground or crushed into fine powder.

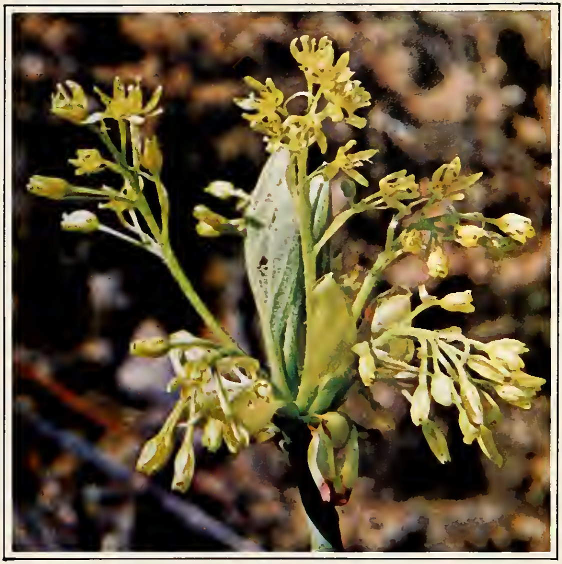
It is virtually impossible to tell homemade filé from the storebought variety, but the practice of grinding a year's supply of the aromatic powder is still a tradition handed down from generation to generation. It dates back well over two hundred years to the days when Acadian exiles from Nova Scotia began to settle in Louisiana west of New Orleans. It was a custom they acquired from the Choctaws and other Indians living in that area. It has hung on for more than two centuries, and chances are Louisiana's seafood gumbo will be further thickened and flavored with filé powder for generations to come.

The name comes from the French *filier,* meaning "ropy" or "to twist." Unlike Creole gumbo's other thickening ingredient—okra—filé is stirred into the gumbo after it has been served over bowls of rice.

The gumbo tree of Cajun-land is no botanical mystery tree and the fine green powder isn't a prime ingredient from the witch's brew in Macbeth. Filé is simply the powdered leaves of the sassafras tree, long known in eastern America for its purported medicinal qualities and its aromatic root and bark oils.

The sassafras is well known in rural areas from Massachusetts to Michigan and Kansas and south to Florida and east Texas. It is often found along fencerows and roadsides, and grows in abandoned fields, preferring a sandy but fairly fertile soil. It is a member of the true laurel family, *Lauraceae*, and many of the Cajuns call it a *safran* tree.

As trees go, the sassafras is a relatively small one, generally 20 to 40 feet high with a trunk ranging from a foot to two feet in diameter. It reaches much larger proportions in the southern portion of its range and occasionally one finds a really large sassafras tree. Because it usually has a comparatively short trunk, the contorted branches form a flat-topped to rounded open crown.



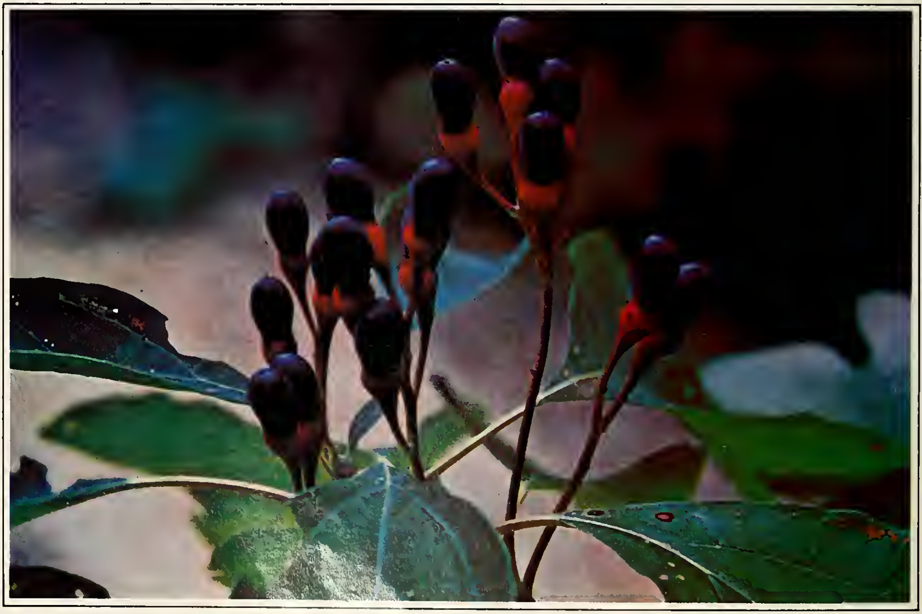
Courtesy Wonderful West Virginia Magazine©

Sassafras wood is durable, although somewhat soft and coarse-grained. Because of its high oil content it is used in fence posts and rails, much as cypress. Some pirogue paddles are made from sassafras wood. It is sometimes used in furniture and in certain areas is marketed as ash or chestnut lumber. There is a pleasing contrast to the light yellow sapwood and orange-brown heartwood that makes it suitable for paneling. If left unfinished it will retain its faint but spicy odor.

Often the flowers of the sassafras tree go unnoticed. The pale gold flowers appear before the leaves in the spring, as does wisteria. The sight of a sassafras tree in full bloom is breathtaking, but the blooming period is shortlived.

In summer, sassafras trees are easily recognized by their aromatic odor, yellowish-green branchlets, and variable leaves. The leaves are alternate, simple, obovate, with entire margins, bluntly pointed tips, and wedge-shaped bases. Three types of leaves are found, often on the same branch. They are three-lobed, unlobed, and some two-lobed and mitten shaped.

Sassafras trees produce gold flowers in the spring before leafing out and edible fruit for wildlife in the fall.



Courtesy Wonderful West Virginia Magazine©

The leaves are from three to six inches long, by two to four inches in width. They are smooth and bright green above, paler and smooth or slightly downy underneath.

In the fall, sassafras leaves turn yellow and red. The blood-orange coloring is a dead giveaway and the flashy coloration not only reveals how many sassafras trees exist but is a definite part of autumn's colorful paint brush.

The fruits which are dark blue on reddish stalks ripen in the fall. The one-seeded drupes are eaten by some birds and other forms of wildlife, but are not considered a prime wildlife food. Young leaves provide moderately good deer browse.

In winter, the twigs are lustrous yellow-green or olive-green, sometimes tinged with brown. They are spicy and aromatic. The bark on older trees becomes thick, reddish brown, with deep irregular fissures and flat-crowned ridges.

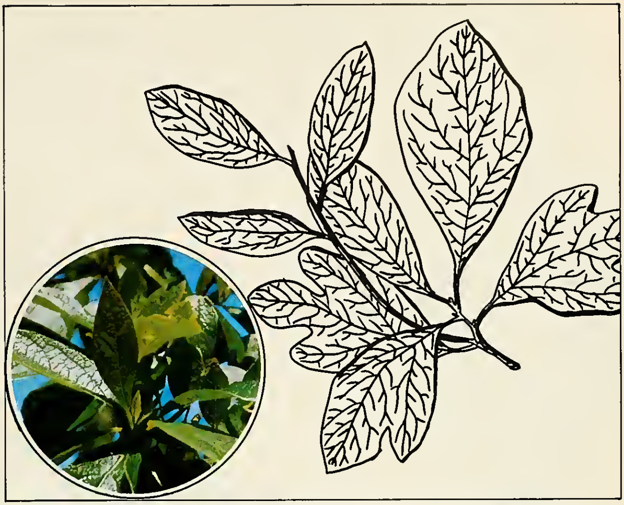
Sassafras trees are completely utilized, from leaves to lumber to roots. Sassafras tea—a great favorite in many rural areas for many things—is brewed from the bark of the roots which are dug in the early spring. Some say it has the same properties that are credited to dandelion tea, beliefs that may be shrouded in folklore but nevertheless passed along from one generation to the next. Tea is also made from the tree's bark.

Early French and Spanish explorers were introduced to the medicinal "values" of sassafras by American Indians. They used oil extracted from the roots of the tree to treat wounds and fevers. The explorers in turn hawked in Europe the botanical balm from the New World. For a time there was a flourishing business in sassafras oil. It was one of Captain Smith's early exports from the Jamestown settlement. Its popularity in Europe soon diminished.

Sassafras oil still has some commercial value in America. It is used in medicinals only to mask taste. The aromatic oil also finds its way into some perfumes and soap. It shows on the labels of some root beer extracts. The oil is produced commercially, but in limited quantity.

Through the courtesy of Mrs. Richard Braud and her mother Mae Bourgeois, both of Thibodaux, I was able to visit Emile and Faye Benoit of Chackbay, a small community about ten miles north of Thibodaux.

The Benoits make filé from sassafras leaves gathered off trees only a stone's throw from their kitchen door.



The uniqueness of the sassafras tree can be seen in the leaf formation, as illustrated in this drawing. Notice that on a single tree, leaves having oval, tri-corner, and mitten shapes occur. These leaves, ground up, make the filé.

Emile Benoit told me the leaves are gathered in late summer before cool weather sets in and changes the color of the leaves.

Benoit carefully dries the leaves in the shade. He said direct sunlight would rob them of their fragrant odor. The powder is made by crushing leaves in tightly woven canvas bags with a mallet. A canvas bag filled with leaves is pounded with the mallet for about two hours to reduce its contents to fine powder. This is spun through a flour sifter to remove bits of leaf stems.

The Benoits sell some of their filé to neighbors. The remainder is stored in the refrigerator to keep its freshness.

McFadden Duffy

Mrs. Richard Braud and Emile Bénoit carefully trim away pieces of bark from the gumbo tree to make sassafras tea.

In some parts of the bayou country sassafras leaves are converted to filé with a pestle and mortar. It is time consuming work but a labor of love and tradition. Gumbo simply isn't complete without filé.

Just as the legends and folklore associated with mistletoe have survived in Europe for centuries, it is certain that sassafras will live in American folklore. An example of that mystique can be found in *Cajun Country Cookbook* by Tony Chachere.

In his cookbook, the Opelousas (one-time home of Jim Bowie, hero of the Alamo and inventor of the famed Bowie knife) sportsman, gourmet, raconteur, chef and bon vivant, wrote:

"In the month of August, during the full moon, break branches (in fully-matured leaf) from sassafras tree. Hang branches to dry in shaded, ventilated place for about two weeks. Expose to sunlight one to one-and-a-half hours before finely-grinding in a mill. Store in amber jars, tightly sealed, in a cool place or in a refrigerator for even longer-lasting quality."

The fact that storebought filé adds a nice bouquet and welcome thickening to a gumbo or hearty soup of any kind is not enough to suffice many of Louisiana's more than a hundred thousand French-speaking citizenry. They feel that filé must be homemade to be perfect and this calls for an annual visit to the gumbo tree.

The Louisiana
BOBCAT

January 1978

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Lloyd Poissenot

This Matter of Animal Rights

By James Hanson

Illustrations by Wayne Miller

In the past few years, there has been a trend forming. A trend toward urbanization—a trend toward concern with the environment. And there has been a trend toward affluence, which allows more people to get out in the woods with backpacks and cameras, and enables the funding of hundreds of protect-the-environment organizations which turn out books and opinions and teaching guides, and which get involved in political activities.

What happened in Ohio last year was a manifestation of this trend. Proponents did not specifically argue "animal rights" in the campaign to outlaw trapping, but they relied heavily upon **personification of animals.** And their objective was to amend the Ohio Constitution so that prohibition against trapping of animals would have the same status, and would be just as inflexible, as the Bill of Rights in

Mr. Hanson is counsel for tha Wildlife Legislative Fund.

protecting the rights of humans. The provision would have overridden the present and future needs of the farmer, the wildlife manager, and the public health officer. It contained no exceptions for these legitimate and vital activities that now defend the line between man and the lesser animals.

The "animal rights" movement is no joke. One can only speculate as to where it may lead. In India, cows, monkeys, dogs and rats take human food, unmolested.

That seems extreme to us. But will you make an exception for gorillas? Koko is a six-year-old female gorilla who, when she was a baby, was transferred from the San Francisco Zoo to Stanford University, where she was able to learn more than 300 hand signals by which she can communicate thoughts such as "happy", "trouble", and "cookie, please". Her IQ is said to equal that of a five-year-old child.

Zoo officials asked to have her returned. A lawsuit brewed. Her teachers contended that she could not go back to zoo life with the other gorillas and be happy. Would the courts protect Koko's right to remain where she was apparently better off, even though her value on the gorilla market was now $20,000?

This conflict was settled when the zoo agreed to sell her to the Gorilla Foundation, which allowed her to continue her training at the university.

If you will make that exception for gorillas, how about dolphins? They are thought to have human-like intelligence. Two assistants working on a government-sponsored project at the University of Hawaii released a pair of bottlenose dolphins which, they said, had communicated to them that they wanted to be free. They are being charged with theft—their lawyer plans to argue that the dolphins are "conscious, sentient beings" penned up against their will.

Isolated cases? No! The Academy of Natural Sciences of Philadelphia is drafting a *"bill of rights for living things"*.

It will take a good bit of maturity for people to accept this concept generally. One must bear in mind that one does not create a right. In practical terms, one can only allocate rights. If one animal is given a right, it is taken away from man or some other animal.

It takes maturity to allow a rat to eat your food while your children are starving. If you give a muskrat or a raccoon a constitutional right not to be trapped, it is at the expense of waterfowl and other birds that find their habitat invaded or destroyed, or their eggs and young consumed. Of course, it is also at the expense of the farmer. . .luckily, he still has the vote in Ohio, and went to the polls in record numbers last November (anti-trapping legislation was defeated 2 to 1).

But will the polls be enough?

A federal court case last fall gave me a jolt. In a suit brought by the Animal Welfare Institute against the Secretary of Commerce, the U.S. Court of Appeals for the District of Columbia Circuit held that the Institute had standing to attempt to protect the Cape fur seal of South Africa under the Marine Mammal Protection Act. And in doing so the court observed:

"Where an act is expressly motivated by considerations of humaneness toward animals, who are uniquely incapable of defending their own interests in court, it strikes us as eminently logical to allow groups specifically concerned with animal welfare to invoke the aid of the courts in enforcing the statute."

Was the judge biased? I find the phrase "animals who" revealing. One doesn't say, "That was the dog who bit me." "Who" is a personal pronoun. In referring to animals, one says "which" or "that". Would that court have used such language if the issue had been a species of tree in the Amazon, the harvest of which was the subject of an American import restriction? Try substituting the word "trees" for "animals" in the court's opinion—would the court have referred to "trees who are uniquely incapable of defending their own interests in court?"

Obviously, the judge personified seals, giving them human attributes and, in my reading, rights. If you personify animals, does not that make them "persons?" The Fourteenth Amendment of the United States Constitution, which has become the legal foundation-stone of our thinking about rights in this country, says that no state shall "deprive any person of life, liberty, or property, without due process of law."

"I say that henceforth and hereafter it shall be a constitutional judgement that animals, like people, shall have rights. Chickens can lay eggs only from 8 to 5. . .pig pens must have approved janitorial service. . .traffic lights will be installed at all deer crossing. . .etcetera!!! Is that clear, y'all?

If a federal judge believes in his heart that animals are "persons", how can he resist analogizing from the language to give rights to a dog, a horse, a gorilla, or a dolphin? In our system, judges cannot change the law. Only legislative bodies can do that. But in recent decades federal judges have demonstrated a penchant for discovering new social truths requiring changes in the outcome of cases that earlier courts would have thought unconstitutional as invasions of the legislative prerogative reflecting the vote of the people. If animal rights becomes generally perceived as a social truth, another revolution in law, beyond the reach of the voter, will have occurred. Remember, federal judges have lifetime appointments.

If you've come with me this far, will you go with me on chicken rights?

"In the egg factories up to five hens are jammed into 12-inch by 18-inch wire cages with sloping floors where they remain throughout their entire laying life, under controlled feeding and lighting for forced egg production. . . . .It is difficult to comprehend the agony of such close confinement." (From a 1977 newsletter of United Animal Defenders.)

Please don't misunderstand me. I do not advocate cruelty. Wanton destruction, or the unnecessary causing of pain, is an activity demeaning to the human being causing it. But the reason egg farmers try to automate their egg production as much as possible (or that cattle raisers try to automate their beef production) is to keep costs down, use less space, better control waste and water pollution—all the things required of them by current population levels and attendant problems.

What this protest about "egg factories" concerns is the cultural deprivation of chickens. In the idealized view of an advocate of "chicken's rights," the chicken should have the right to stroll around the barnyard in the sunshine, pecking at pieces of corn and an occasional dung beetle, and fraternizing with other chickens. Because if I were a chicken, that's what I'd want to do.

But does the caged chicken know what it is missing? If we could produce even more eggs, more efficiently, wouldn't that mean an even greater likelihood of those eggs reaching the stomachs of millions of underfed children in this country?

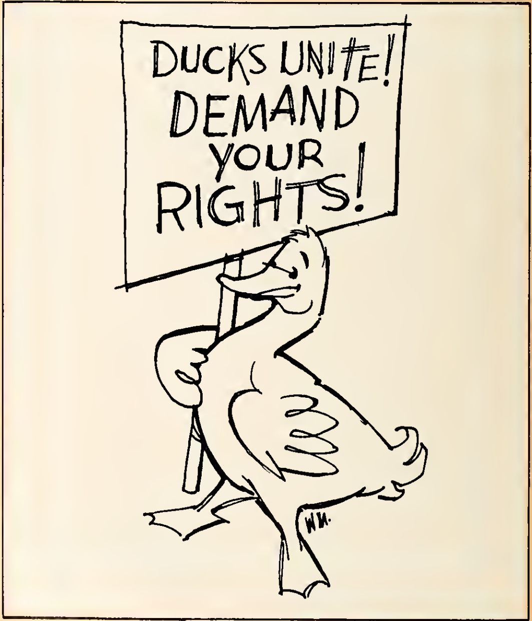
Malnutrition is a fact. It is rampant in this affluent country, the country in which sensitive urbanites have enough money to finance organizations that protect animals. This illustrates the point I made earlier: rights aren't created out of thin air, they are allocated. If you give rights to a chicken, you may be taking them from a child.

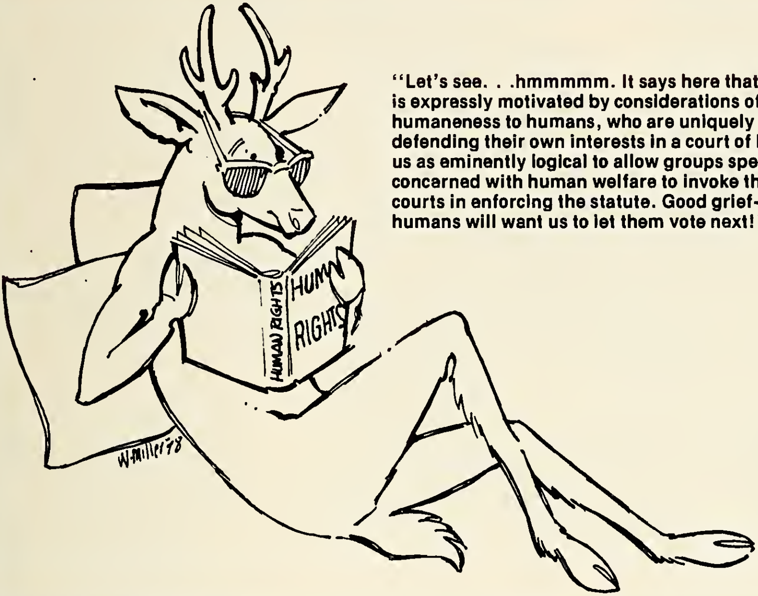
Now if your eyes are good enough, we can take a look at the snail darter. Should the snail darter have a **right** to exist, as some have urged? If it does, then economic considerations have little or no bearing. That is the magic of the word "rights". The snail darter is an endangered species, placing it in a special category requiring special attention. The prevention of species extinction is, to me, a legitimate and important pursuit. My point of contention is using the word "rights" as a technique to accomplish this end.

Declaration of "animal rights" is an attempt to place inflexible protection around animals of various types. I find it objectionable for the same reason I found that proposed trapping amendment to the Ohio Constitution objectionable—it represents an attempt to create a barrier in thinking and in law and substitutes for intelligent application of animal control and animal protection laws. Admittedly, it also may substitute for unintelligent laws—yet it is, itself, composed in large part of unintelligence because it makes a current decision to be applied to future events inflexibly without consideration of the circumstances.

I think we could give rights to gorillas without causing much disruption; for raccoons, though, it would be disastrous. But once you apply the word "rights" to animals, where draw the line? In my experience, the "animal rights" movement has been an elitist disguise of the principle, "I know better how to handle your affairs than you do, and I will proceed to implement my preferences by getting laws enacted that curtail your activities.

If all hunting were prohibited, for no reason other than the feeling by a majority of a state legislature that that is what its constituents desired, I submit it would be unconstitutional. Hunting is a natural, normal activity which has been traditionally the right of Americans. Statutes phrase the legal right to hunt in terms of a privilege granted by the state, but underneath that apparent "privilege" is a firmer substance having the characteristics of a right. The state can take away your driver's license if you misbehave, but the state can't prohibit all driving on grounds that the majority of people didn't like automobiles.





"Let's see. . .hmmmmm. It says here that when an act is expressly motivated by considerations of humaneness to humans, who are uniquely incapable of defending their own interests in a court of law, it strikes us as eminently logical to allow groups specifically concerned with human welfare to invoke the aid of the courts in enforcing the statute. Good grief—I guess humans will want us to let them vote next!"

So looking again at the subject of "animal rights", the phrase is essentially a debating trick which has been escalated to the status of principle. It is a trick because if you allow yourself to argue with anyone as to what rights animals should or should not have, you have forfeited the debate. . .because things can't have rights. Only persons can have rights. And to give an animal rights makes it some sort of person.

All our constitutional protections, all the English-speaking tradition of political freedom, all the feelings that we have developed in the continuing debate on human rights and the subconscious reactions we have to the taking of life or to the deprival of liberty or dignity of the individual attach to persons. Thus, if a majority of people can be convinced that animals as our fellow creatures are persons, simply with less intelligence and in different forms from the human animal, then it follows that a majority of people will be easily convinced that our tradition of human rights should attach to animals.

And in this there lies a legal trick also. Because if people generally—and thus judges—believe that animals have rights, what further reason does one need to prohibit hunting?

Under present status of our constitutional law, we can still argue, that the hunter should not be deprived of his traditional liberty to take wild game unless the legislature can justify the restriction as a reasonable exercise of police power. But if animals have rights, then the presumption is turned around. . .and the invasion of rights must be justified.

Should animals be declared "persons," with rights?

This is a question with profound implications of a political, philosophic, and religious nature. It was not what our forefathers had in mind in adopting the United States Constitution. The Bible doesn't say animals should have rights. Animal rights is a radical concept. More than that, it is nothing short of revolutionary. So when I read a case in which a federal judge appears to personify fur seals, I am amazed!

I would urge that the "animal rights" slogan be identified for what it is—a verbal lever by which certain people hope to translate their preferences into law. The slogan confuses the issue. It is aimed at the urban dweller who is in the political majority. . .who is isolated from the world of nature. . . who does not have to deal with the consequences of political decisions concerning animals. . .but who can afford to think of them in an idealized way.

In the recent election in Ohio rural counties voted heavily against the anti-trapping amendment, some of them in excess of 90 percent of the vote. The two areas where voting went in favor of the amendment were Cleveland and Cincinnati, the most intensive urban areas of the state. Simply stated, the more closely involved the voter was with the animals, the more trapping was approved; the farther removed, the less it was approved.

One reading of this would be that wisdom is gained by having one's mind unpolluted by experience.

The Seismic Guardians

By Frank Davis
Photography by Lloyd Poissenot

The phone rang. "Good morning—Wildlife and Fisheries Seafood Division," the friendly voice answered.

But the caller on the other end sounded hurried—and gruff. "Yea—listen! I was out there in Lake Decade today fishing, and I want to report some people who are destroying some really good area!"

"Yes, sir. What are they doing?"

"Using dynamite, lady! They're shooting off dynamite! And I'll betcha if you sent a game warden out there right now you'd find thousands of fish lying dead on the water!"

"Wait—who's shooting dynamite?" the young woman queried, trying to get all the information down on paper. "Outlaws?"

"*I dunno,*" the man yelled into the receiver. "They got a big barge out there that looks like a drilling rig with a pile driver on top of it. And they're sticking pipe in the ground and shooting off dynamite!"

"Oh....just a second, sir," the woman said, a smile in her voice. "I'll transfer you to someone who can tell you exactly what's going on in Lake Decade."

Seconds later the caller had been patched through to the department's seismic exploration office and was being given full explanation as to what he had seen. . .and full assurance that the incident was not killing thousands of fish, shrimp, oysters, and other aquatic resources in Lake Decade.

"We get calls like these all the time," John Ellington, Louisiana Wildlife and Fisheries seismic section supervisor, explained. "Lots of folks around aren't aware that full-scale geophysical and seismological operations are continually going on all across Louisiana. And the operations become really upsetting when they see them happening in the coastal marshes. But there is no cause for alarm—the explosions do very little damage to fish and wildlife."

The Louisiana wetland parishes are not only hotspots for fishing and hunting, they are hotbeds for large reserves of natural gas and oil. That makes the marshes (and many upland areas as well) the target area of interest to two user groups—the sportsman and commercial fisherman *and* the seismic and petroleum companies. Sometimes. . .each fear the potentiality of the other.

"There's really no need for that though," Ellington says. "Seismic operation, exploration for oil, and other related geophysical research is not detrimental to any form of hunting and fishing in Louisiana for one reason—the entire thing is under continual monitoring. My section employs seismic agents who work at these geophysical jobsites and supervise the operation from start to finish. It's their responsibility to make certain all the rules and regulations applying to the protection of fish, wildlife, natural resources, and ecological balance are followed to the letter."

Left, John Ellington talks to a seismic crew chief about moving to a new shooting location; above, a member of Shoreline Geophysical Company implants a dynamite charge into a casing.

About a month ago Ellington invited me to see firsthand the impact of dynamiting on shallow-water coastal marsh. To document the results on film, I took department photo editor Lloyd Poissenot along.

We arrived at the "shotsite" (seismic industry jargon for the place where the dynamite would be exploded) early in the morning, fighting a wind-blown drizzle and temperatures in the low-thirties. For nearly an hour we sat in a boat bobbing around on a brisk chop on the water and waiting for a 15-man seismic crew to "ready a shot" that would test for the possibility of oil beneath tons of Louisiana gumbo and muck.

Using the drilling barge, engineers sunk casing pipe in the mud 20 feet below water bottom and deposited in the casing a long, green tube holding a 10-pound charge of dynamite. After positioning, repositioning, and positioning again, they gave us the signal. . .*explosion in five seconds!*

Our boat was about 40 yards away from the casing, but the rig-boat that sunk the tube and the dynamite still floated *directly over the explosives!*

"Lord, John!" I shouted to Ellington, "you mean that barge and the five men on it are going to stay there when that charge goes off?"

He never had time to answer. Instantly, there was a jolt. Shock waves appeared to come up directly under our boat. But it was almost a letdown of a sort. . .here I was waiting for this big blow-out, this eruption, and instead all there was was a churning in the water near the barge, kinda like the bottom has *burped! Once!* Lloyd gave me a look that translated, "You mean, that's it?"

"Now you can see why such controlled procedure has such insignificant impact on fish, shrimp, crabs, and what-not," Ellington explained. "You were expecting a big explosion. . .and that's what most people conjure up in their minds when you as much as mention the terms seismic operations and geophysical exploration. But that's not how it is at all."

Ellington, Poissenot, and I spent several hours at the shotpoint that morning. In an attempt to get better photographic coverage, we had the seismic crew set off several other charges. . .but none proved very dynamic. Then I suddenly realized as undeniable proof what Ellington was saying all along: *after all the explosions, there were no fish floating belly-up anywhere in the area!* And Lake Decade is good fishing grounds.

When I mentioned it to the party chief in charge of the operation, all he said was, "Naw—it don't bother em!"

Occasionally, in jest, Ellington's section is referred to as "the seismic guardians." While colloquial, it may be an extremely accurate description. His seismic agents do "guard" fish, wildlife, and natural resources against man-made potential for harm. Working with environment and ecology, the agents, stationed at each seismic site in Louisiana (presently 47 of them), observe day-by-day exploration practice.

As mandated by Act 175 of 1954, they ensure that: no seismic work is begun without approval of the Louisiana Mineral Board and the Louisiana Wildlife and Fisheries Department . . . no seismic work is conducted in any wildlife refuge, waterfowl refuge, game preserve, fish hatchery, or oyster seed ground reservation without written authorization by the state. . .complete and detailed seismic reports are filed daily with the department. . .any change in seismic location be approved prior to relocation of equipment. . .dynamite, air gun, and primacord usage stay within maximum allowable limits. . .explosions are done at proper depths to reduce injury to fish and wildlife organisms. . .no seismic explosions are detonated on the *bottom* of the Gulf of Mexico, Mississippi Sound, Breton Sound, Chandeleur Sound, and Lake Borgne. . .all equipment (and discard products) used in geophysical exploration be removed from a jobsite after work is completed to avoid littering. . .no explosives are detonated within 250 feet of an oyster bed or 1000 feet of a fishing boat. . .and countless other regulations are followed.

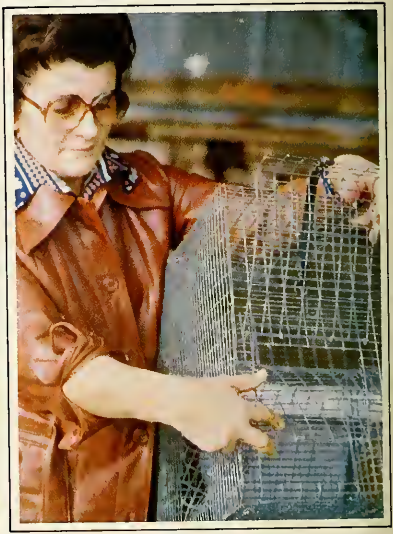
"I'm sure there's a lot of concern among sportsfishermen, commercial fishermen, the oyster people, trawlers, and just about everybody else who sees dynamite being shot in the wetlands," Ellington added, "and the concern is good. They want to conserve the fish and wildlife we have in Louisiana, and anything that looks like it might be disturbing those fish and wildlife makes them call our office and tell us about it."

"But we need to be able to tell a lot more people than just those who call that the seismic companies really aren't damaging anything for fishing and hunting."

"How about us doing a story in the Conservationist?" I asked.

"Hey. . .now that's a good idea!"

eel deal



Top left and right, Louisiana eels. . .above, Mrs. May Usannaz checks out a specialized eel trap. . .left, a horseshoe crab is chopped into bait-size chunks for use in the traps.

By McFadden Duffy
Photography by Lloyd Poissenot

George Robberecht of Montross, Virginia, modestly admits he is the largest eel dealer in the United States. The seafood company that bears his name supplies domestic outlets with tens of thousands of pounds of live eels annually.

At the same time, Robberecht's company is trying to supply Japanese, Dutch, Danish, French, German and Italian consumers with sufficient stocks of live American eels. They are considered gourmet food in those countries where they are broiled, baked, smoked, fried, cooked on spits and consumed with relish.

His problem, and that of other eel dealers in the United States, is that there are not enough eel fishermen along the Atlantic coast or in the Gulf states taking advantage of the commercial abundance of American eels in those rivers and streams linked to the sea.

There are plenty of eels but they have to be caught before they can be loaded aboard jets for speedy transportation to eager world markets.

Louisiana gives promise of becoming an important source of supply for the writhing sea creatures that can best be described as textured fish when they are dressed, cooked, and eaten.

That's why Robberecht and a few carefully picked Virginia eel fishermen visited Louisiana in December. They wanted to find out for themselves how abundant eels are in Louisiana. They also wanted to pass along to Louisiana fishermen certain techniques and suggested equipment necessary to take eels in profitable numbers.

Early in the year a few fishermen in southeast Louisiana began to express interest in going after eels commercially. With Robberecht and other Virginia eel dealers willing to pay as much as 50¢ a pound to the fishermen, eel fishing could bring extra income during those off seasons when shrimp trawling, crabbing, and commercial fishing reached a lull.

May Usannaz of Chef Menteur is the person responsible for sparking the interest of Virginia buyers and eel fishermen. While area fishermen are only slowly warming up to the idea of fishing eels commercially, she has installed holding tanks and water circulating pumps at her crab shop at Chef Pass. Her enthusiasm has captured the interest of other women in that area. They see it as an opportunity to turn a neat profit in easy-to-catch slippery eels. About a half-dozen women are ready to start an eel deal that may be more profitable than it probably sounds.

Backing the program fully is the Louisiana Cooperative Extension Service. Assistant Area Agent (Fisheries) Jerald Horst for Orleans, Jefferson, and St. Charles Parishes has been pushing eel fishing for over a year. He has little doubt there is good money to be made. Emergence of eel buyers and non-resident eel fishermen probably provided the momentum necessary to possibly launch the Louisiana eel fishery.

Fishermen of all ages have had contact with eels at some time. Most anglers can remember catching eels by mistake while fishing. They are difficult to handle. Putting a piece of wet spaghetti through a keyhole is on a parity with dislodging a hook from an eel's mouth. Eels are unattractive, slippery to handle, and closely resemble snakes—qualities certainly not in heir favor.

Adding to the sinister aura attached to eels is the fact it wasn't until early this century that scientists discovered where and how eels reproduced. For over two thousand years eel reproduction had been shrouded in mystery.

Aristotle advanced the theory that eels arose spontaneously from the mud in freshwater and the sea. Others held their origin to be small worms or horsehair washed into the sea. A few centuries after Aristotle's time, Pliny the Elder ventured the belief that eels reproduced by rubbing loose small portions of their bodies against rocks.

When we were kids we believed you could make two garden worms by breaking one in half. It was a sort of Pliny theory and we believed it.

During the years 1905-1922 Dr. Johannes Schmidt came up with some facts that were as remarkable as the ancient beliefs were fantastic. Both the American eel and its close relative the European eel reproduced in the Sargasso Sea.

The sea of grass itself, formed and fractured by ocean winds and currents, is the subject of legends past and present. A frightened Columbus spent several days in the beds of floating seaweed. Wherever old sailors are gathered there are spine-chilling tales of the Sargasso Sea.

That American eels spawn in the Sargasso Sea along with their European counterparts is one of those realities of nature. It takes the European eels two to three years to make their way to the estuaries and rivers of Europe. The American eels, with less distance to cover, can migrate to Atlantic and Gulf coasts in about a year.

Ironically, American eels can be shipped to Europe overnight by jet and to Japan in a single day.

When American eels reach the Eastern and Gulf coasts, it is believed the males remain in tidewater. The females ascend the rivers and mature. When they are fully capable of reproduction, they move downstream, returning to the males and eventually the Sargasso Sea where they reproduce and die.

This is a reverse of the reproductive cycle of salmon. These fish return to the rivers from the sea to spawn. Eels leave the rivers for the sea to spawn and never to return.

Growth of eels is slow. They are almost ribbonlike and transparent during the first year. Eels are between two and three inches long when they begin to show up along the North American coasts. They are known as elvers when they reach this size. Adult eels may be from five to twenty years of age.

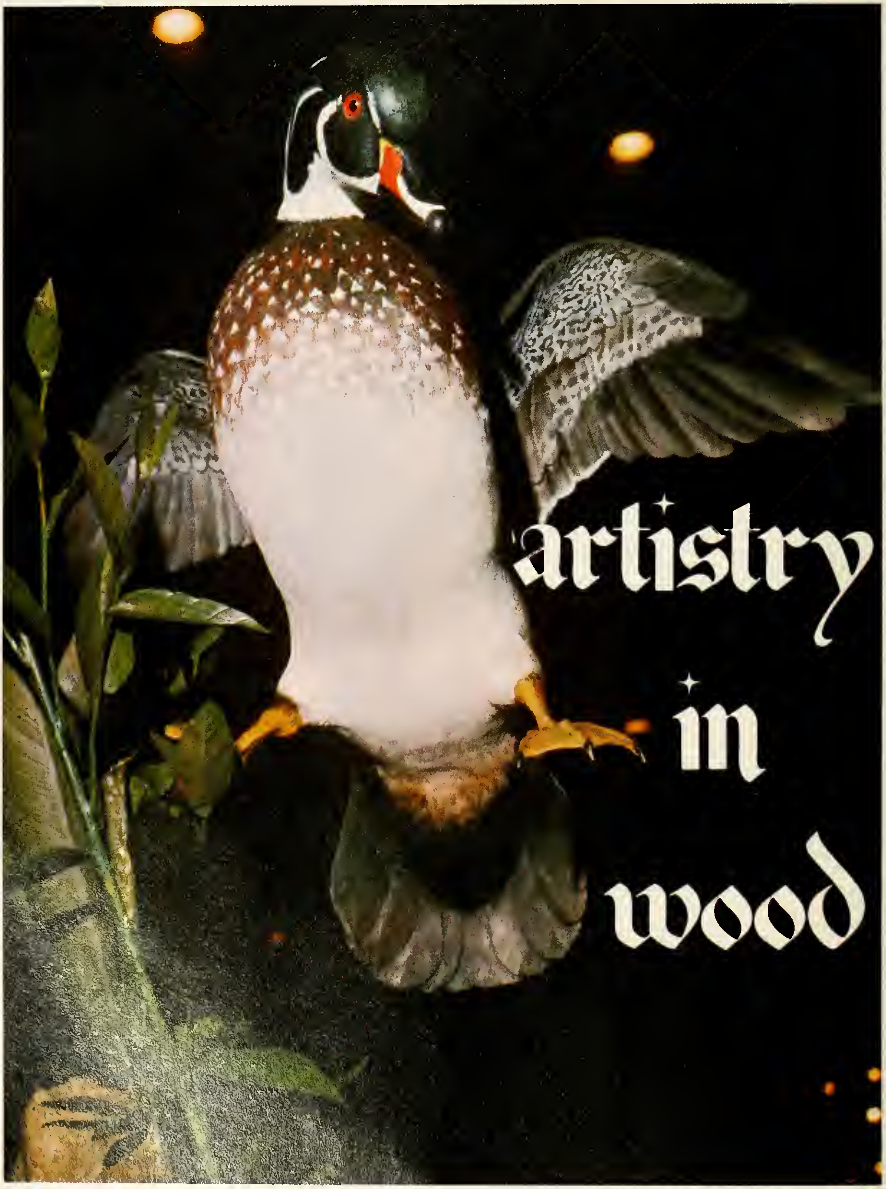
The distance to be traveled by eels and the time involved before reaching maturity and starting the long journey back to the Sargasso Sea make this glimpse into the complexities of nature even more remarkable.

Among families of Old World origin, eels are in demand in this country around Christmas time. They are consumed in great quantities during the pre-Christmas period. Main supply points for North American customers are the St. Lawrence River in Canada, Cape Charles, Virginia, and Chesapeake Bay. Buyers and fishermen from Virginia who have visited Louisiana in the past year feel the state could become an important source of supply for domestic consumption as well as export.

Eels can live so long without water that there is a common misconception that eels sometimes migrate overland. That isn't true, but this hardiness does allow longterm storage and transportation in aerated trucks and tanks.

I found the flesh of eels a trifle oily, but that could have been the result of the manner in which they were cooked. The flesh is more chewy than other fish. On the other hand, persons who are fond of eel might consider speckled trout, flounder and redfish soft. It is a matter of taste. Broiled eel has much eye appeal.

At present May Usannaz is going ahead with plans to give eel fishing a serious try. There's a good market for large quantities of Louisiana eels. Fishing techniques are being worked out and a system for marketing established. May and her associates in this unusual fishery may have something real good going for them. At any rate, they are on the ground floor in a fascinating eel deal.



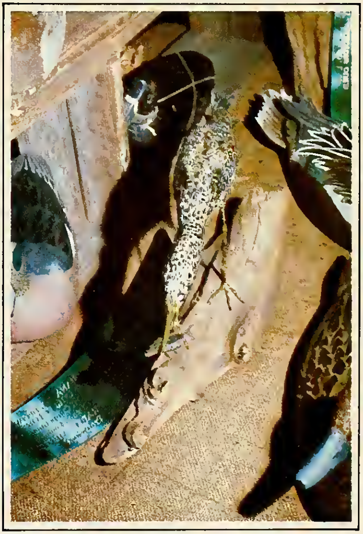
artistry in wood

By Julia Murchison

Photography by Frank Davis

The 4th annual Wildfowl Festival sponsored by Louisiana Wildfowl Carvers and Collectors Guild to be held next September 30 and October 1 in New Orleans is a must for duck decoy collectors, duck hunters, and art appreciators. This competitive decoy show represents the largest collection ever of hand-carved decoys from Louisiana artists.

Louisiana is unique in that it has over 4,000,000 acres of wetlands at the end of the Mississippi Flyway. This marshland provides habitat for tens of thousands of ducks and geese every year on their flight to central and south America. The wetlands people are Cajuns, descendants of French Canadians who were expelled from Acadia (Nova Scotia) in the late 1700s and came to Louisiana. They settled along the vast network of bayous, thousands of miles of waterways. Hardy folks, they have adapted to the land despite hurricanes, floods, and other hardships and know their land and its wildlife intimately. They make their living from hunting, fishing, and trapping. This harmony between people, marshland, and waterfowl resulted in a distinctive branch of American folk art—decoy carving.



Decoy making began to be popular in the mid-19th century. Louisiana carvings have been made since early years, but received little recognition until recently. Today, local carvers rank with the best in the nation.

Old masters and modern artists will display their work in the 1978 decoy show. The "who's who" of the decoy carvers guild includes such names as Mitchel LaFrance, Roy LeGaux, Tan Brunet, and Charles Hutchison (winner of last year's $3,000 Louisiana Championship award). In addition, many of the 400 accomplished carvers identified in Charles Frank's book, *Louisiana Duck Decoys*, will be present with displays of their best art.

The exhibits will include "working" decoys (roughly carved, often with only an axe and pocketknife) and "decorative" art (suitable for a

"The talent displayed by many of these master decoy carvers boggles the mind. . .knife marks in the wood actually rival the natural feel of feathers!"

mantle and not for the water or a hunter's decoy sack).

Now that decoy carving is recognized as an art form in its own right, more and more people are appreciating the aesthetic qualities of the hunter's floating sculpture. Decoy collectors are now tracing decoy history and development. Hand-carved pieces are a prize. Prices range all the way from $15 to $15,000. Many at the Wildfowl Festival will be for sale.

The first Louisiana Wildfowl Festival was held in 1975 in the gym of a New Orleans high school. Each year since, it has grown in size and participation. Last year's show, held at Braniff Place Hotel in New Orleans, included 162 carvers, 16 painters, and 472 display items from Louisiana and out-of-state. In the auction, 152 pieces sold for a total of $3,942. The festival committee expects this year's show to be even bigger. With rising interest in this new art form, more people are carving decoys than ever before. Many artists will have pieces ranging from wildlife paintings to decorative and working decoys.

Most species of ducks will be represented, but favorites from past shows have been mallards, canvasbacks, pintails, and teal. Tupelo gum is a popular wood because it is dense and strong and therefore durable. It is also expensive and hard to work.

Hand carved and painted decoys take as many as 50-125 hours to complete. But each end result is a work of rare beauty, so detailed that man-made feathers almost rival nature. This art is a visual and physical perception which requires touching. Thousands of art connoisseurs and decoy lovers will see and touch these sculptures. Artistry in wood is undoubtedly a magnificent example of Louisiana bayou folk art and a preserver of our wetlands and waterfowl heritage.

The decoy show will be held in the Grand Ballroom of Grand Hotel in New Orleans.

PIE'S POTPOURRI

By Marian Pie Pendley

GUMBO MAGIC

Lloyd Poissenot

SEAFOOD GUMBO

2 pounds shrimp
½ pint oysters
1 pound can crabmeat
2 tablespoons oil
2 tablespoons flour
3 cups okra, chopped
2 onions, chopped
2 tablespoons oil
1 can tomatoes
2 quarts water
1 bay leaf
1 teaspoon salt
3 pods garlic, minced
Red pepper
1 tablespoon finely chopped parsley
1 tablespoon finely chopped green onion tops

Peel shrimp and devein. Make a roux of oil and flour, stirring constantly until dark brown. Add shrimp to roux and cook for a few minutes. Set aside. Smother okra and onions in oil. Add tomatoes when okra is nearly cooked, then add water, bay leaf, garlic, salt and pepper. Add shrimp and roux and mix well. Cover and cook slowly for 30 minutes. Add oysters and crab meat and simmer for 10 to 15 minutes. Add parsley and green onion tops a few minutes before serving over hot cooked rice. Serves 6 to 8.

WILD DUCK AND OYSTER GUMBO

1 pint oysters
Salt, black pepper
Parsley, minced
Onion tops, minced
2 wild ducks, cut in pieces
1 cup cooking oil
1 cup flour
1 large onion, chopped
2 tablespoons Tabasco
2 quarts warm water

Make a roux by heating oil and adding flour. Blend well and cook until the flour browns, stirring constantly. Add onions and cook. Season duck well and fry in the roux until oil comes out around edges. Add warm water and cook slowly about 2 hours until duck is tender. Season with pepper and salt. Add oysters 20 minutes before serving. Sprinkle next with minced parsley and onion tops and filé. Serve with rice, French bread and red wine!

CHICKEN-ANDOUILLE GUMBO

1 large hen
1 pound andouille, sliced
1 cup flour
1 cup oil
4 medium onions, chopped fine
4 ribs celery, chopped
1 small bell pepper, chopped
1 clove garlic, minced
Salt and red pepper
2 quarts water
½ cup green onions, finely chopped
1 tablespoon parsley, finely chopped

Cut up chicken, wash and season with salt and pepper. Make roux with flour and oil until dark brown. Add seasoned chicken and onions and cook slowly over low heat until onions are transparent. Add other vegetables and andouille, cover and let simmer about half hour, stirring often. Add water and increase heat until boiling. Now lower heat to simmer, cover and cook until chicken is tender. About fifteen minutes before it is done, add green onions and parsley. Serve over rice, and let each person add filé to his own taste.

"WE GET LETTERS..."

Dear Mr. Angelle,

After battling the high tides of the recent hurricane season, I feel compelled to write to express my appreciation for the assistance rendered to Lafourche Parish by personnel of the Louisiana Wildlife and Fisheries Department.

Throughout my many years as Civil Defense director of Lafourche Parish, we have had to ask for many sacrifices on the part of our citizens, particularly when requesting that they leave their homes and seek safe shelter. This was never an easy task, for we realize how difficult it is to ask someone to leave everything he has accumulated in his lifetime; however, we have never shirked our responsibility in issuing the evacuation order in light of the priceless value which we place on the safety of our loved ones.

My task has been made easier by the assistance which your commission consistently has rendered whenever my call has gone through. So on behalf of the governing authority, and speaking for the citizens of the Parish of Lafourche, we wish to express our sincere appreciation for the cooperation and assistance received in our time of need.

Sincerely,
Thomas M. Barker
President/Director
Lafourche Parish Police Jury

Dear Senhores of the Commission:

I wish to thank your honorable governor, Edwin Edwards, and all the directors of the commission and the entire staff.

I received from your government and the courtesy, of the Wildlife and Fisheries Department a very appreciative educational document of your natural resources involving the entire scope of ecologia. This material will be of great assistance to us and our government. . .of the splendid data that your scientists and staff have so diligently acquired through your ecological studies. We will attempt to follow some of your great work and policy.

Your entire staff again is to be highly complimented for your work, and for the courtesy you have extended to a neighboring land. . .Brazil.

Please accept warm greetings from this writer and our country.

Most respectfully,
Roland S. Blinstrup
Delegado E Fundador
Associacao Brasijeira Decaca.
E Preservacco Flor E Fauna
Brazil

Ed. Note: Mr. Blinstrup's group is the first wildlife society to be organized in Brazil. It is non-profit and fully voluntary.

Dear Editors:

I recently watched a TV program called "In Search Of. . .", narrated by Leonard Nimoy. The program concentrated on a suspected sub-species of human which supposedly lives in or near Honey Island Swamp near New Orleans.

I understand there is quite a large search going on by a few individuals looking for this swamp monster. Don't think I'm crazy, but what can you tell me about this creature?

Thank you,
A. L. Hieronymus
LaMarque, Texas

Dear Mr. Hieronymus,
Our staff knows very little about the so-called Honey Island creature. We've heard people say it's there; even had one man claim to have seen it. But as with all things of this nature, it is very difficult to separate fact from fiction. . .and we haven't been able to. —FD

Dear Mr. Davis,

In a recent issue of the Conservationist you had an article relating to the water hyacinth, which is considered detrimental to the uses of waterways in this state. In the article it is mentioned that aerial application of herbicides are used to control the growth of these plants.

My question is two-fold. First, what is the composition of this herbicide with regard to harmful chemicals entering the lower end of the food chain? And secondly, why doesn't the department consider harvesting these plants and using them for either bio-gas production or feed for livestock? I am familiar with experiments regarding these uses of hyacinths and they have been successful. As a matter of fact, one such experiment is being conducted at L.S.U.

Thanks,
William Magee
Baton Rouge

Dear Mr. Magee,
The chemical is called 2-4-D and its properties make it non-toxic to fish and wildlife. As far as harvesting the hyacinths and using them as you suggest, there's a problem with "production" and "marketing." Yes, cattle feed of high protein analysis can be produced from hyacinths. . .and the plants can be altered to produce methane gas. But mass production by industry thus far has proven to be too costly for both ventures, and the "market" for the products just isn't there. —FD

Dear Mr. Angelle:

We, the undersigned, would like to commend your department of enforcement on their recent arrests in DeSoto Parish.

We have been continuously harrassed and intimidated by illegal hunters in recent years. Agents Green, Gamble, and Gillespie should be commended and should know that the landowners, homeowners, cattle farmers, and citizens of our area appreciate their efforts.

Should we ever be able to assist your department in any way, please let us know.

Yours very truly,
H.P. Anderson
Pleasant Hill, LA

Wildlife Needs You

National
Wildlife Week
MARCH 19-25, 1978